REMARKS

Status

Claims 1-4 are pending and stand rejected. Claim 1 has been amended. No new matter is added to the application.

Objection to FIGS. 9-13

FIGS. 9-13 are objected to on the grounds they lack a legend such as –Prior Art--. The applicant must respectfully traverse the Examiner's grounds of rejection regarding claims 10-13 . However, Figure 9 is discussed in the first line of page 3 of the specification and the applicant agrees that it should also be labeled with the legend "Prior Art".

Therefore, figure 9 is amended to include the legend "Prior Art".

Objection to Claim 1

Claim 1 is objected to as containing minor informalities. The Examiner also makes recommendations for amendments to claim 1. Taking the Examiner's comments into consideration the insertion of the word "retrieved" has been made to claim 1. However, the inclusion of the "previous" as recommended by the Examiner is believed to be redundant and confusing. Therefore, the Examiner's objection on these grounds is respectfully traversed.

Rejection under 35 U.S.C. §112, first paragraph

Claims 1-4 are rejected under 35 U.S.C. §112, first paragraph, for lack of enablement. According to the Examiner, the recitation in claim 1 that the retrieving means retrieves a new boundary value based solely on a boundary value obtained by a previous optimizing processing, "not a current power reproduction level," contradicts FIGS. 3 and 5, which the Examiner says show that the optimum reproduction power is stored according to the current reproduction level. The Examiner also contends there is no support in the specification for this negative annotation.

The applicant cannot agree with the Examiner. The claim language states "wherein the retrieving means retrieves a new boundary value based solely on a boundary value obtained by a **previous** optimizing processing and not a current power reproduction level". Specifically, Step S28 of Figure 3 is discussed in the last full paragraph of page 17 of the specification that states,

> "step S28 follows to set the reproduction power concerned Pr to a lower boundary value Prmin. In step S29 the lower boundary value Prmin is stored in a built-in memory, and thereafter in step S30 a value obtained by adding a power for four steps to the lower boundary value Prmin is set as an optimum reproduction power Prcent, to terminate the procedure. Consequently, reproduction and recording of signals will be started with an optimum laser power."

In order to clarify this feature claim 1 is amended to indicate that "wherein the retrieving means retrieves a new boundary value based solely on a boundary value obtained by a **previous** optimizing processing and not based solely on a current power reproduction level".

Further, the reproduction power adjustment is executed in step S35 in FIG.4, where steps S41 to S50 are repeated (see the last paragraph or page 19 of the specification.)

The laser power adjustment includes steps S48-S50 in FIG. 5, where Prmin is stored in the memory, thereafter the reproduction power Prcent = Prmin + 4 is set, and then the adjustment ends (see the last paragraph of page 20 of the specification).

In the case of again making the laser power adjustment , in step 41, Prmin, which has been stored in the memory in S49 in the previous adjustment, is read out, and the adjustment starts with Pr = Prmin.

This can shorten the adjustment time, which is described using FIG.7.

Thus, thus the applicant believes that the present invention is supported in the specification and has enablement. Therefore, withdrawal of the rejection of Claims 1-4 under 35 U.S.C. §112, first paragraph, is respectfully requested.

Rejection under 35 U.S.C. §102(b)

Claims 1-4 are rejected under 35 U.S.C. §102(b) as being anticipated by Nanba et al. (U.S. 5,796,704), which the Examiner contends discloses all features of the rejected claims for the reasons set forth on pages 3-5 of the Office Action.

The present invention is a disk playback device having a laser drive circuit (6) that can feed a drive signal to an optical head (5). The laser drive circuit (6) is also capable of adjusting the power of a laser beam irradiated by the optical head (5). Further, a control circuit (7) is used to detect the error rate of a reproduction signal and to control operation of the laser drive circuit (6). The control circuit (7) repeatedly retrieves one of two boundary values, and the error rate is determined to be a prescribed value or in the vicinity of a prescribed value and the control circuit

(7) calculates the optimum reproduction power based on the one boundary value retrieved. The control circuit (7) then retrieves a new (lower) boundary value based on the boundary value obtained from a previous optimum reproduction power calculation. Because the retrieval of the new, lower boundary value ($Prmin_2$) is based on the previous value ($Prmin_1$),which is closer to the new lower boundary value ($Prmin_2$) than the currently set reproduction power (P_1), less time is needed to retrieve the lower boundary value, as well as to calculate the optimum reproduction power.

Nanba describes an optical disk in a control module (30) which controls the writing, reading, and erasing operations. A light-emitting power control module (38) controls a drive current of the laser diode (22) through a laser driving circuit (64) so as to have a specific light-emitting power predetermined for each of the above operations. Thus, the writing, reading, and erasing operations each generates a laser beam of specific light-emitting power. On the basis of an instruction from the whole control module (30), a reproduction power-calibrating module (74) performs a calibrating operation to determine the optimum reproducing laser power for use when reproducing the optical disk.

Pointing to FIG. 8, Nanba discloses that the reproduction output level is read again in step S3. While the processes in steps S3-S5 are repeated, when the preceding reproduction output level is equal to or lower than the present reproduction output level in step S4, step S6 follows. The predetermined value Wc (for example, 1.0 mW) is added to the value of the reproducing power W at that time to calculate the optimum reproducing laser power.

On pages 5 and 6 of the Office Action, the Examiner dismisses the arguments previously advanced in support of patentability, maintaining that Nanba discloses one of two boundary values, as well as optimum reproduction power-calculating means for calculating optimum reproduction power based on the one boundary value retrieved.

However, column 10, lines 57-65 of Nanba et al. state,

> "While the processes in steps S3 to S5 mentioned above are repeated, when the preceding reproduction output level is equal to or lower than the present reproduction output level in step S4, step S6 follows. The predetermined value Wc, for example, 1.0 mW is added to the value of the reproducing power W at that time, thereby calculating the optimum reproducing laser power."

Therefore, contrary to the Examiner's assertions Nanba et al. fails to disclose "wherein the retrieving means retrieves a new boundary value based solely on a boundary value obtained by a **previous** optimizing processing and not based solely on a current power reproduction level." Thus, the Examiner's rejections are respectfully traversed.

Therefore, withdrawal of the rejection of Claims 1-4 under 35 U.S.C. §102(b) as being anticipated by Nanba et al. (U.S. 5,796,704) is respectfully requested.

CONCLUSION

The applicant respectfully submits that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated **October 16, 2007**. In view of the aforementioned amendments and accompanying remarks, claims, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosures:
Replacement Sheets of Drawing (Figure 9)